

Application No.: 09/485,225

Docket No.: 20061-00088-US

REMARKS

The Office Action and prior art relied upon have been carefully considered. In an effort to expedite the prosecution of the present application, claim 7 has been canceled and its subject matter is now incorporated in independent claim 12. Newly added claims 13 and 14 set forth the dependent subject matter from claim 12.

It is believed that the clarifications now incorporated in claim 12 render allowable all of the claims remaining in the application.

Claims 3, 7-10 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai (U.S. Patent No. 5,517,735) in view of Tracy (U.S. Patent No. 4,559,677) and Wackerly (U.S. Patent No. 5,839,768).

A concise review of the cited references will now be given and should be helpful to the Examiner.

The invention in Tracy is summarized in claim 1 of that patent and it includes:

- a). A resilient stretchable tube composed of thermoplastic material;
- b). at least one hook member fixed to one end of the tube; and
- c). plug means disposed within said end of the tube for fixing the hook member to the tube.

The hook member includes a hood portion having a sleeve portion for receiving the end of the tube and the plug means are inserted through the forward end of the sleeve portion.

The sleeve portion includes a tapered bore to securely fix the end of the tube therein to inhibit it from backing out of the sleeve portion.

Application No.: 09/485,225

Docket No.: 20061-00088-US

The tube is internally dimensioned to receive the rear end of the plug means to compress the end portion of the tube against the inside surface of the sleeve portion.

From a reading of Tracy and the invention summarized in claim 1, one skilled in the art would understand that the tube is fixed to the hook and is prevented from backing out from the hook by:

- a). the tapered bore of the sleeve portion of the hook; and
- b). the compression by plug means of the end portion of the tube against the inside surface of the sleeve portion.

There is no mention in this reference of a metal component in the sleeve portion of the hook so that one of ordinary skill in the art is induced to think that the tube is fixed to the hook regardless of the presence of metal within the hook.

Nevertheless, in the embodiments disclosed by Tracy, the hook member is essentially made of a flat metal hook having an outer coating of thermoplastic material.

Since the thermoplastic material is only a coating, the strong component of the hook is the metal component and consequently, the metal component must include a sleeve covered with the coating to provide the sleeve portion of the hook.

Since the coating is not intended by itself to withstand the compression of the end portion of the tube by the plug, it is obviously the function of the metal sleeve to withstand such compression.

It is also the reason why the metal sleeve must have a substantial length corresponding to the length of the plastic inserted within the tube since a mere metal ring would be too short.

Application No.: 09/485,225

Docket No.: 20061-00088-US

The specification explains, in col. 1, line 29 *et seq.*, that a wire metal hook having a plastic coating tends to bend out of shape and that might be prevented by using a flat metal hook composed of hardened material to render the hook stiff and rigid (col. 2, line 16 *et seq.*).

Thus, the metal component of the hook as disclosed by Tracy:

- a) must be flat and composed of hardened material to prevent a bending of the hook; and
- b) must provide a sleeve intended to receive the end of the tube and to withstand the lateral compression of the tube by the plug inserted in the end of the tube so as to fix the tube to the hook.

The cited reference to Tsai discloses a hook molded from resilient material for fastening a rope as disclosed in col. 2, lines 17-20 of the reference.

The hook is provided with a latch and it is essential that the material of the hook be resilient to allow the coupling portion of the latch to be opened when the stretching force is released from the rope as disclosed in col. 2, line 65 – col. 3, line 4.

It is important to note that in this reference the rope is not fixed to the hook and is only retained. The rope is retained not by a lateral compression but by an axial abutment.

To provide the hook with a metal component could be detrimental to the necessary resilience of the hook material. Thus, if one of ordinary skill in the art were to contemplate making the Tsai hook stronger, without losing resilience, he would be motivated to give the hook an appropriate cross-section as in the case of the hook disclosed in U.S. Patent No. 3,748,703 (see col. 2, lines 39-43).

Assuming, *arguendo*, that one of ordinary skill in the art would provide the hook with a metal insert to prevent bending of the hook as taught by Tracy, he would put the metal insert within the J-shaped portion of the hook since this is the portion of the hook that is most likely to

Application No.: 09/485,225

Docket No.: 20061-00088-US

bend. One of ordinary skill in the art would interpret Tracy as teaching the insertion of a metal sleeve within the shank portion of the hook since such a sleeve, in Tracy, is intended to withstand a lateral compression of a tube by a plug, to fix the tube to the hook, whereas there is no such compression, tube, plug, or affixing in the Tsai device.

Accordingly, it is Applicant's contention that only through the use of impermissible hindsight could one combine Tracy and Tsai in a manner accomplished by the present invention.

Further, even a combination of teachings from the cited references would fail to suggest the present invention wherein the metal component of the shank is a ring and not a sleeve, which is located around an inlet duct close to a shoulder intended to provide an abutment designed to stop the enlarged end of the cable when a force is applied to the cable.

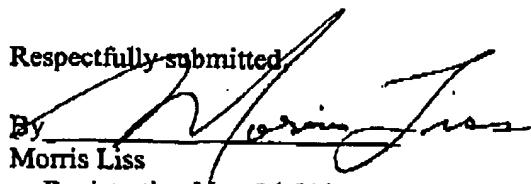
Tracy in no way suggest the insertion of a metal ring (nor a sleeve) only around the inlet duct of the hook to reinforce an axial abutment as shown in Fig. 2 of the present application.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 20061-00088-US from which the undersigned is authorized to draw.

Dated: June 2, 2004

Respectfully submitted,

By 
Morris Liss

Registration No.: 24,510
CONNOLLY BOVE LODGE & HUTZ LLP
1990 M Street, N.W., Suite 800
Washington, DC 20036-3425
(202) 331-7111
(202) 293-6229 (Fax)
Attorney for Applicant